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/s/ Erin Cowles/  
Erin Cowles

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No.	:	10/821,715	Conf. No.:	1531
Applicant	:	Eldridge et al.		
Filed	:	April 8, 2004		
TC/A.U.	:	2813		
Examiner	:	Schillinger, Laura M		
Docket No.	:	P35C1D1-US		

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**AMENDMENT**

To Whom It May Concern:

In response to the Office Action of October 23, 2007, the shortened statutory period for response to which ends on January 23, 2008, please amend the application as follows:

**Amendments to the Claims** are reflected in the list of claims that begins on page 2 of this paper.

**Remarks/Arguments** begin on page 4 of this paper.

Appl. No. 10/821,715  
Amdt. dated January 23, 2008  
Reply to Office Action of October 23, 2007

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**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1-25. (Canceled)

26. (Currently Amended) A method of making electrical connections between at least one a first electronic component and a second electronic component, comprising:

fabricating a plurality of spring contact elements directly upon said ~~at least one~~ the first electronic component, ~~said the~~ spring contact elements each having a tip end which is spaced above a surface of the ~~at least one~~ first electronic component and at least one of ~~said the plurality of~~ spring contact elements being a different size than ~~the others of the plurality of~~ spring contact elements; and

bringing the ~~at least one~~ first electronic component together with a second electronic component so that the tip ends of the spring contact elements are in electrical contact with corresponding terminals on the second electronic component.

27. (Currently amended) The method according to claim 26, wherein:

the ~~at least one~~ first electronic component is ~~at least one~~ an active semiconductor device;

and

the second electronic component is a test substrate; further comprising:

powering up the active semiconductor device while maintaining the tip ends of the spring contacts in electrical contact with the terminals of the second electronic component.

28. (Canceled)

29. (New) The method according to claim 26, wherein the plurality of spring contact elements each have an elongate structure and the at least one of the plurality of spring contact elements has a different length than the others of the plurality of spring contact elements.

Appl. No. 10/821,715  
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30. (New) The method according to claim 29, wherein the length is measured in a plane substantially parallel to the surface of the first electronic component.

31. (New) The method according to claim 30, wherein the at least one of the plurality of spring contacts elements has substantially the same spring constant as the others of the plurality of spring contact elements.

32. (New) The method according to claim 26, wherein the at least one of the plurality of spring contacts elements has substantially the same spring constant as the others of the plurality of spring contact elements.

33. (New) The method according to claim 26, wherein the plurality of spring contact elements each have a tapered body coupling the tip end to the surface of the first electronic component.

34. (New) The method according to claim 33, further comprising tailoring the taper for each of the plurality of spring contact elements so that the plurality of spring contact elements each have a substantially equal spring constant.

35. (New) The method according to claim 26, wherein:  
 the fabricating comprises fabricating additional spring contact elements directly upon at least one other first electronic component, the additional spring contact elements each having a tip end which is spaced above a surface of the at least one other first electronic component; and  
 the bringing comprises bringing the first electronic component and the at least one other first electronic component together with the second electronic component so that the tip ends of the spring contact elements and the tip ends of the additional spring contact elements are in electrical contact with corresponding terminals on the second electronic component.

Appl. No. 10/821,715  
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### REMARKS/ARGUMENTS

#### **Introduction:**

Claims 1-25 were previously canceled. Claims 26 and 27 are amended. Claim 28 has been canceled in this amendment, being drawn to a non-elected species. New claims 29-35 have been added. Claims 26-27 and 29-35 are now pending in the application. Applicants respectfully request reexamination and reconsideration of the application.

#### **Rejections under 35 U.S.C. § 102:**

Claims 26-27 stand rejected as anticipated by Swapp (U.S. Patent No. 5,172,050). Applicants respectfully traverse the rejection as Swapp fails to teach or suggest all of the claimed features.

Claim 26 recites "fabricating a plurality of spring contact elements directly upon *the first electronic component*, . . . at least one of the plurality of spring contact elements *being a different size* than others of the plurality of spring contact elements." The PTO equated Swapp's electrodes 13 and tips 19 with the spring contact elements of different sizes recited in claim 26. As can be seen in the drawings of Swapp, however, tips 19 are attached to probe card 16 and electrodes 13 are attached to substrate 12. Tips 19 and electrodes 13 are therefore not attached "directly" to a "first electronic component." Nor is there a logical reason to modify Swapp such that electrodes 13 and tips 19 are both attached to substrate 12 or both attached to probe card 16. In fact, such a modification would destroy the purpose of Swapp, which is to test substrate 12 using probe card 16. For at least the forgoing reasons, claim 26 is not only novel over Swapp but is also not obvious in view of Swapp.

Moreover, Swapp's electrode 13 is not a spring contact element and is thus structurally different than the spring contact elements recited in claim 26. For at least this additional reason, claim 26 is patentable over Swapp.

#### **New Claims**

New claims 29-35 are dependent from claim 26 and are also allowable for at least all of the above cited reasons. Moreover, claims 29-35 recite additional features not taught or rendered obvious by Swapp. For example, claim 29 recites "wherein the plurality of spring contact elements each have an elongate structure and the at least one of the plurality of spring contact

Appl. No. 10/821,715  
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elements has a different length than the others of the plurality of spring contact elements," which is not taught or rendered obvious by Swapp. This and other features recited in claims 30-35 further distinguish over Swapp.

**Conclusion:**

In view of the foregoing, Applicants submit that all of the claims are allowable and the application is in condition for allowance. If at any time the Examiner believes that a discussion with Applicants' attorney would be helpful, the Examiner is invited to contact the undersigned or Ken Burraston at (801) 426-2100.

Respectfully submitted,

Date: January 23, 2008

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Jan. 23. 2008 6:39PM

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FROM: N. Kenneth Burraston

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COMMENTS: Transmitted herewith is an Amcndment and General Authorization form for:

App. No.: 10/821,715

Confirmation No.: 1531

Applicant: Eldridge et al.

Filed: April 8, 2004

TC/A.U.: 2813

Examiner: Schillinger, Laura M.

Docket No.: P35C1D1-US

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GENERAL AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT AND  
GENERAL PETITION FOR EXTENSION OF TIME

## To Whom It May Concern:

Throughout prosecution of the above-identified patent application, and pursuant to 37 C.F.R. § 1.25(b), where no check is received by the Commissioner, Applicants authorize and request the Commissioner to charge all fees due at any time during the pendency of the above-identified application (or to credit any overpayment) to Deposit Account No. 50-0843, account name Kirton & McConkie (Order No. 12439-0264).

In addition, throughout prosecution of the above-referenced patent application, and pursuant to 37 C.F.R. § 1.136(a)(3), Applicants authorize and request the Commissioner to treat any correspondence requiring a petition for extension of time as containing a request for the required extension of time, and the Commissioner is authorized to charge payment of the requisite petition fees (or credit any overpayment) to Deposit Account No. 500843, account name Kirton & McConkie (Order No. 12439-0264).

Respectfully submitted,

Date: January 23, 2008

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